AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at line 5, page 2 (paragraph [0005] in the published version) with the following rewritten paragraph:

-- According to another aspect of the invention, a window regulator is provided having a runner that travels along a guide rod. A carrier is connected to the window, and the runner engages the carrier to force the window up and down as the runner travels along the guide rod. The engagement of the runner and carrier provides for movement of the carrier along the travel path of the window without necessarily precisely following the travel path of the runner. --

Please replace the paragraph beginning at line 13, page 4 (paragraph [0015] in the published version) with the following rewritten paragraph:

-- Fig. 5 is an isometric view showing the outer and [[upper]] lower sides of the carrier plate shown in Fig. 3; --

Please replace the paragraph beginning at line 18, page 4 (paragraph [0017] in the published version) with the following rewritten paragraph:

-- Fig. 7 is an exploded view of an alternative runner and ~~slider~~ glider combination; --

Please replace the paragraph beginning at line 21, page 4 (paragraph [0019] in the published version) with the following rewritten paragraph:

-- Figs. 9A and 9B are detailed views of regions ~~IX-A and IX-B~~ of the drive mechanism shown in Figs. 8A and 8B, respectively; --

Please replace the paragraph beginning at line 3, page 5 (paragraph [0022] in the published version) with the following rewritten paragraph:

-- Figs. 12A and 12B are ~~detail~~ detailed elevation views showing another variant of second embodiment, having a runner modified for convenience of installation of a window and carrier plate; and --

Please replace the paragraph beginning at line 10, page 5 (paragraph [0024] in the published version) with the following rewritten paragraph:

-- Turning to the drawings, a window regulator assembly 12 is schematically illustrated in Fig. 1. The assembly 12 is installed as part of vehicle side passenger door 10 and includes a linear lead screw or threaded drive rod 16[[,]] extending in a vertical direction and rotatably mounted on a frame 32. A carrier plate 18 is slidingly mounted to the frame 32 and also slidingly and pivotally mounted to the drive rod 16, as described in greater detail below. An arcuate window 20 is mounted to the carrier plate 18 at the lower edge of the window 20. The assembly 12 includes arcuate forward and rearward glass run channels 22, 24 which receive, respectively, the forward upright edge 26 and rearward upright edge 28 of the window 20. As described in greater detail below, rotation of the drive rod 16 leads to axial and pivotal movement of the carrier plate 18 therealong corresponding to the arcuate travel path of the window 20 as it rides upwards and downwards in the arcuate glass run channels 22, 24. --

Please replace the paragraph beginning at line 22, page 5 (paragraph [0025] in the published version) with the following rewritten paragraph:

-- Fig. 2 is an isolated view of the drive components of window regulator assembly 12 according to a first embodiment. The assembly 12 includes a longitudinal base frame 32 secured within the interior of the door 10 at both ends thereof. The drive rod 16 is journaled for stationary rotation in the frame 32 via bushings 33. The actuator, such as electric motor 14 coupled to a gear reducer 15, is drivingly connected to the lower end of drive rod 16 by any suitable manner known in the art, such as through the use of gears, a belt drive, a flexible cable or a universal joint, in order to rotate the drive rod about its central linear axis 34. A runner 36 having an internal threaded bore 38 is threadingly mounted on the drive rod 16. As will be explained further below, in the fully assembled mechanism, runner 36 is prevented from rotating with respect to the drive rod, and thus the runner travels axially along the drive rod 16 when it rotates, either up or down, depending upon the direction of the rotation. The travel path of the runner 36 thus parallels the central linear rotational axis 34 of drive rod 16, and thus the drive rod 16 essentially acts as a guide rod for the runner 36. Runner 36 includes trunnions 40a, 40b which have an elliptical cross section, the purpose of which will be described in greater detail below.

Base frame 32 includes an integrally formed guide 42 having the same arcuate bend as window channel runs 22, 24, the function of guide 42 being described further below. --

Please replace the paragraph beginning at line 15, page 6 (paragraph [0026] in the published version) with the following rewritten paragraph:

-- Fig. 3 is similar to Fig. 2, but shows carrier plate 18 installed on frame 32. Referring additionally to the isolated view of Fig. [[5]] 4, carrier plate 18 includes a primary channel 44, which is generally axially upright when installed. In other words, the primary channel 44 extends in the vertical direction. The channel 44 receives [[the]] a longitudinal body portion 46 of runner 36. The trunnions 40a, 40b, which protrude from the longitudinal body portion 46 of runner 36, seat in secondary channels 50a, 50b, respectively, cut into sidewalls 64 of carrier plate 18. The secondary channels 50a, 50b extend in a lateral direction substantially orthogonal to the vertical direction and the trunnions 40a, 40b define a lateral axis 51 substantially orthogonal to the central axis 34. Carrier plate 18 also defines slider channels 52a, 52b, which receive guide 42 of frame 32. --

Please replace the paragraph beginning at line 22, page 6 (paragraph [0027] in the published version) with the following rewritten paragraph:

-- Plate 18 is rigidly affixed to window 20 by means of fasteners (not shown) received through plate apertures 56 that communicate with suitably located apertures in the window 20. Further support is leant to the plate-window connection by protruding plate support 58 (Fig. 5) on which the lower edge of the window rests 20. Many other techniques for attaching glass to the carrier plate 18 are well known in the art and may be used in the alternative. --

Please replace the paragraph beginning at line 4, page 7 (paragraph [0028] in the published version) with the following rewritten paragraph:

-- The upward and downward motion of runner 36 is caused by rotation of drive rod 16 under control of the actuator. The runner 36 is prevented from rotating with respect to drive rod 16 because longitudinal body portion 46 of runner 36 is ensconced in the primary channel 44 of carrier plate 18, abutting the side walls 64 thereof. More particularly, the cross-sectional shapes of the surfaces defining the primary channel 44 and the longitudinal portion 46 of the runner 36

match each other sufficiently to affix the runner 36 against rotation about the axis 34 of the drive rod 16 while at the same time permitting the required degree of movement of the runner 36 in other directions within the channel 44, described further below. Central axis 34 of drive rod 16 is linear so the travel path of runner 36 as it travels between the upper and lower positions shown in Figure 1 is also linear. Window 20 and plate 18 follow parallel arcuate travel paths as defined by rails 22, 24 and guide 42, an arcuate axis of each of these being parallel to the arc indicated by arrow 30. The arcuate path followed by the plate 18, the upward and downward motion of which is driven by the runner 36, which itself follows a linear path, is accommodated by elliptical surfaces 60 of the trunnions 40a, 40b which bear on surfaces ~~66, 68~~ 62, 64 of the secondary channels 50a, 50b of the plate 18. In other words, the elliptical cross-section of the trunnion surfaces 60 which bear on surfaces 62, 64 of the secondary channels 50a, 50b of the carrier plate 18 permit the plate 18 to pivot slightly about the lateral axis 51 and to move towards or away from drive rod 16 (in a horizontal or cross-car direction substantially orthogonal to the vertical and lateral directions) as necessary to accommodate the non-parallel travel paths of the plate 18 and runner 36. This is shown in the cross-sectional views of Figs. 6A - 6C which illustrate the position of the runner 36 within the channel 44 as the window 20 moves from a lower, open position (Fig. 6A) to an upper, closed position (Fig. 6C). It will further be appreciated that guidance of the plate 18 along the travel path of the window 20 (as determined by guide rails 22, 24) is further assured by the fit of guide 42 on base 32 within slider channels 52a, 52b, which precludes undue stress from being placed on the window 20. In preferred embodiments, the window 20 and glass run channels 22, 24 will also have a uniform radius of curvature which is imparted to the slider channels 52a, 52b. --

Please replace the paragraph beginning at line 7, page 8 (paragraph [0029] in the published version) with the following rewritten paragraph:

-- A variant of the first embodiment is shown in Fig. 7 in which trunnions 66a, 66b of runner 68 are received within gliders 70a, 70b having apertures 72a, 72b. The gliders 70a, 70b, in turn, are mounted in the secondary channels 50a, 50b of the carrier plate 18. --

Please replace the paragraph beginning at line 10, page 8 (paragraph [0030] in the published version) with the following rewritten paragraph:

-- It will be noted from the foregoing the arcuate guide 42 enables the length of the glass run channels 22, 24 to be minimized. That is, the glass run channels 22, 24 do not have to be the full height of the window travel since the guide 42/frame 32 can support the window 20 and its arcuate travel. --

Please replace the paragraph beginning at line 14, page 8 (paragraph [0031] in the published version) with the following rewritten paragraph:

-- Figs. 8A, 8B, 9A, 9B & 10 illustrate a second embodiment of the invention. Here, channel frame 100 has an upright threaded drive rod 102 rotatably mounted thereto. The top end is thus suitably journaled to the frame 100, with the lower end drivingly connected to motor 104. A runner 106 is seated within channel 108 of frame 100, the channel 108 being of relative constant cross section along the travel path of the runner 106, with the outer cross section of the runner 106 generally matching the cross section of the channel 108. The runner 106 is again rotatably mounted on the drive rod 102, the matching surfaces of the runner 106 and the channel 108 into which it is received precluding rotation of the runner 106 within the channel 108 so that rotation of the drive rod 102 results in the travel of the runner 106. --

Please replace the paragraph beginning at line 23, page 8 (paragraph [0032] in the published version) with the following rewritten paragraph:

-- The runner 106 has an arm 110 protruding from the channel frame 100 and a carrier plate 112 is mounted to the arm 110. More particularly, arm 110 includes a slot 114, which lies in a plane generally orthogonal to the axis of screw 102. A carrier mounting shaft, bolt 116, is received within slot 114. Bolt 116 provides an axis of rotation 118 for the carrier plate 112, which axis 118 is parallel to the plane of the slot 114 and orthogonal to the rotational axis of drive rod 102. Mounting bolt 116 is also free to move parallel to the plane of slot 114, towards and away from screw 102, which corresponds to the cross-car direction in the case of the mechanism being installed in a passenger door of an automobile. Carrier plate 112 includes abutment walls 120a, 120b, which walls abut side walls 122a, 122b of runner arm 110 to substantially limit translational movement of the plate 112 to movement towards and away from the lead screw

102, i.e., to preclude movement of the axis of rotation 118 of the carrier plate 112 to being within the plane of the slot 114. --

Please replace the paragraph beginning at line 11, page 9 (paragraph [0033] in the published version) with the following rewritten paragraph:

-- Channel frame 100 includes mounting members 124, 126 for affixing the window drive mechanism to the automobile, as within the interior of a car door. Again, the rotation of the carrier plate 112 about axis 118, and translation of the plate 112 in a direction parallel to the plane of slot 114, provides for the arcuate movement required of the plate 112 as it moves up and down along the rotating drive rod 102, despite the fact that the frame 100 and the drive rod 102 are linear in configuration. --

Please replace the paragraph beginning at line 19, page 9 (paragraph [0035] in the published version) with the following rewritten paragraph:

-- For ease of installation, runner arm 110 may include an opening into which is slidingly received separate slotted member 138. When in the open position as illustrated in Fig. 12A, in which member 138 is drawn away from the base portion of the runner arm, gap 140 is provided between the overhanging portions 142, 144 of the slotted member 138 and the base of the arm 110, respectively. When the slotted member 138 is in this position, bolt 116 of the carrier plate 112 can be received into the slot, the slotted member 138 slid into the closed position of Fig. 12B for installation of the carrier plate 112 and window 20. Suitable securing means is provided to hold the slotted member 138 in the installed position to the runner arm 110. --

Please replace the paragraph beginning at line 4, page 10 (paragraph [0036] in the published version) with the following rewritten paragraph:

-- In the case of the second embodiment, as illustrated, the travel path of the carrier plate 112 is not fixed with respect to the channel frame 100 (as for example, by guide 42 and slider channels 52a, 52b of the first embodiment). The travel path is thus defined [[by]] only by glass run channels 22, 24 suitably mounted to the automobile. See Fig. 1. One of the advantages of this embodiment is that the window travel is not dictated by the curvature of the window regulator rail which, as a result of manufacturing tolerances, may differ from the curvature of the glass run

channels 22, 24. This enables the system to be used in a wide variety of vehicle doors since the rail does not have to be specifically manufactured for various vehicle models. In order to further augment this capability, the carrier plate 112 can be configured to receive a bracket to which the window pane 20 is bonded with a suitable adhesive. --

Please replace the paragraph beginning at line 15, page 10 (paragraph [0037] in the published version) with the following rewritten paragraph:

-- A third embodiment of the invention is illustrated in Figs. 13A and 13B. Here, arm 200 is pivotally connected to runner 202 at first end 204 having first axis of rotation 206. Carrier plate 208 is connected to the arm 200 at second end 210 having a second axis of rotation 212. Each pivotal connection provides for rotation about an axis that lies in a plane orthogonal to the axis of rotation of the lead screw, and which is also orthogonal to the axis of the drive rod. The two axes of rotation 206, 212 are thus generally parallel to each other. Again, this arrangement permits movement of the carrier plate 208 with respect to the arm 200 and movement of the arm 200 with respect to the runner 202, as the runner 202 moves along the drive rod provides for the movement required of the plate 208 as it moves up and down along the rotating drive rod. --